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ABSTRACT

An act of rhetoric has attitudinal significance; that is, a part of rhetoric involves persuasion. Further, attitudinal frames of reference relate to and result from the retrieval of stored information (memory, etc.) and the generation of arguments. By studying the relative strength that subjects use in arguing an "issue-concept," the subjects' latitude for acceptance or rejection can be determined as well as their own generation and sorting of arguments. The extremity of a subject's attitudinal position toward an "issue-concept" also related to the number of arguments generated. Finally, the extremity of position and degree of involvement relate directly to the number of arguments generated. (CH)

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HUMAN INFORMATION AND ARGUMENT RETRIEVAL: LANGUAGE CORRELATES AND ATTITUDINAL FRAME OF REFERENCE

RHETORICAL INVENTION: ATTITUDINALLY BOUND

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When an individual engages in creating something to say, he engages in a rhetorical act, that is, rhetorical invention. Rhetoric, as we know, is by nature multidimensional. Among the many dimensions of rhetoric, Wayne Brockriede notes that "two kinds of attitudes have rhetorical significance; attitudes toward the central idea in a choice-making situation and the ideological structure of other related attitudes and beliefs."[1] Although this writer is not willing to defend the two-kinds-of-attitudes hypothesis, the Brockriede statement does make it clear that attitudes do have rhetorical significance. Our question is: Are attitudinal frames of reference related to the retrieval of stored information and the generation of arguments (invention)?

What is meant by attitudinal frame of reference? For the purpose of discussion attitudinal frame of reference shall include the following: (1) the intensity and direction of a person's position toward an issue-concept, (2) an individual's involvement with an issue-concept, and (3) the relative importance of an issue-concept to the person.

According to the Sherifs, a person is related to "motivationally relevant objects, persons, events, groups, and prevailing social values and objects with strong ties or aversions, as well as definite commitments and identifications."[2] The perceived relatedness between an individual and an issue-concept is anchored in the individual's own stand (or position) toward the issue-concept.[3] Own position therefore

1. "Dimensions of the Concept of Rhetoric," Quarterly Journal of Speech, LIV (February, 1968), p.4.

2. Muzafer Sherif and Carolyn W. Sherif, Social Psychology, (New York, 1969), p. 295.

3. Ibid., pp. 340-344.

can be viewed as one dimension of attitudinal frame of reference. It can be investigated in terms of its direction (positive or negative) and its intensity (strong or weak). Own position is included in the total set of positions an individual will accept, reject, or be noncommittal about. As the Sherifs have noted in their research, an individual's own position operates as an anchor for judging other positions. Experimental evidence demonstrates that attitude-relevant items are ordered, or ranked, within the bounds of what the individual is willing to accept or reject in terms of his own stand.[4] Thus an individual's responses toward an issue-concept is represented by a range of positions which he finds acceptable, or objectionable, or toward which he is noncommittal. The range of acceptable and objectionable positions will vary depending upon the individual's involvement with the issue-concept. Therefore, involvement within an issue-concept constitutes another dimension of attitudinal frame of reference.

The final dimension of attitudinal frame of reference is concerned with how important an individual perceives an issue-concept to be, given his own set of priorities. Depending upon an individual's own set of priorities, issue-concepts vary in how important the individual regards them. Operationally, importance of an issue-concept to the self is defined by an individual's self-rating of an issue-concept on a rating scale.

4. See Carolyn W. Sherif and Muzafer Sherif, eds., Attitude, Ego-Involvement and Change, (New York, 1967), pp. 121-126.

The discussion thus far on attitudinal frame of reference can be summarized as follows. A decision made regarding incoming information will be anchored by the individual's own stand on the issue. Incoming information will be processed and judged as acceptable, unacceptable, or neither depending upon the strength and direction of an individual's own position, the relative degree of perceived importance of the issue to the individual, and his degree of involvement with the issue. Thus, through examination of these constructs an assessment of attitudinal frame of reference can be made.

Invention for rhetorical theorists concerns the discovery of what to say when confronted with the necessity of speaking. Invention is an internal process which takes place in the storehouse of the mind and includes the process of retrieving information and generating arguments. By observing the product of invention, verbalized arguments, and by analyzing attitudinal frames of reference we can explore possible relationships between the two concepts.

Among those rhetoricians who have been concerned with the process of invention, there seems to be agreement that when a speaker engages in the process of discovering arguments about an issue-concept he is consciously or subconsciously assisted by a schema of cues. This schema of cues has been more commonly called a topical system.[5] These topics appear to be broad classifications (eg. expediency, feasibility) which transcend subject matter. A speaker can use these topice as devices for retrieving stored information and thereby generate possible lines of argument. Operationally, therefore, invention is defined as a process

5. Charles S. Baldwin, Ancient Rhetoric and Poetic, (Massachusetts, 1959), pp. 17-21.

of generating arguments on an issue-concept with the aid of a topical system.

William F. Nelson attempted to examine the use of "topoi" as a tool for retrieving stored information, and to investigate basic psychological constructs underlying a topical system. The particular topical system Nelson studied was devised by Wilson and Arnold in Public Speaking as a Liberal Art.[6] Nelson's immediate concern was to answer the question: Does the notion that a topical system assists human information retrieval enjoy both construct and empirical validity? According to Nelson's investigation "people categorize incoming sensory data according to internalized schema of more-or-less discrete information sets (conceptual clusters)."[7] He goes further to explain that "Conceptual behavior involves processes adding to, retrieving from, and restructuring within and among information sets. Each set is hierarchically ordered so that a superordinate term can account for all the items associated in its set."[8] The superordinate terms represent "places in memory where arguments are stored," and evidence suggests that the use of the topical system permits greater recall of arguments then when such a system is not used. Specifically, in Nelson's research: "The mean number of responses generated by subjects in one hour using a topical system was compared with the mean number of subjects using free-recall across two levels of concept meaningfulness and two levels of verbal ability. In all cases subjects using a topical system were

6. Wilson and Arnold, p. 115.

7. William F. Nelson, An Historical, Critical, and Experimental Study of the Function of Topoi in Human Information Retrieval, (The Pennsylvania State University, 1969), unpublished doctoral dissertation, p. 51.

8. Ibid., p. 51.

found to generate more items than subjects using free-recall."[9] Based on these findings, the evidence strongly suggests that the discovery of arguments is enhanced by the use of a topical system. It therefore was the belief of this writer that through the use of a topical system it would be possible for subjects to retrieve stored information in the form of arguments which might then be investigated in terms of attitudinal frame of reference.

To investigate the relationship between invention and attitudinal frame of reference the following research design was used. Ninety-three subjects from the basic speech course at The Pennsylvania State University were randomly assigned to four rooms. Subjects participated in a five step experimental task. Briefly summarized the five steps were: (1) half of the experimental group filled out a Semantic Differential on the issue-concept of abortion, while the other half of the group responded to a nine item Ordered Alternative listing of positions on the legalization of abortion in Pennsylvania, (2) all subjects were given an Importance Rating Scale for eight issue-concepts which included the issue of abortion, (3) subjects were given forty-minutes to generate arguments (both Pro and Con) in response to the question: Should abortion be legalized in the state of Pennsylvania? (4) subjects sorted the arguments they generated according to arguments which they accepted, rejected, and to which they remained uncommitted, and (5) the procedures used in step one were reversed for each of the two experimental groups.

9. Ibid., p. 52.

The use of the Semantic Differential provided the researcher with data regarding the direction and intensity of subjects' attitudinal positions. The nine item Ordered Alternative listing of positions provided the researcher with a method of identifying subjects' degree of involvement with the issue. By having the subjects sort their arguments, latitudes of acceptance, rejection, and noncommitment were identified according to the subjects' own designations. The Importance Rating Scale was constructed in similar fashion to the Semantic Differential. It offered the researcher an indication of the subjects' view of the "importance" of abortion, given the subjects' own set of priorities. The importance of abortion could then be compared with the other issues that the subjects also had to rate. The use of the issue-concept of abortion was determined through prior investigation.

These procedures yielded data which revealed that the ninety-three subjects participating in this experiment, for the most part, maintained moderately favorable attitudinal positions toward the issue-concept of abortion. They viewed abortion as being moderately important to themselves. The majority of their own positions toward legalization of abortion in Pennsylvania were Pro. They tended to accept more of their own arguments than arguments which they rejected or remained uncommitted to. And finally, the subjects appeared to have a fairly high degree of involvement in the issue-concept.

The data demonstrated that subjects with extreme attitudinal positions, that is, Semantic Differential scores between 1.00 and 2.25 and 5.75 and 7.00, tended to accept more of their arguments than arguments which they rejected. Furthermore, the more important the issue-concept

was to the subject, the more acceptable arguments he generated. Acceptable arguments contributed most to increases in total arguments, rejected arguments contributed moderately, and noncommittal arguments contributed least. On the other hand, when subjects were confronted with the entire range positions toward the legalization of abortion in Pennsylvania -- as was included in the Ordered Alternative listing -- they tended to accept fewer positions than positions rejected. These findings indicate that the subjects did perceive themselves to be involved with the issue of abortion.

The analysis and relationships observed were made without regard for types of arguments generated, the quality of the arguments, the soundness of the evidence, or the logical content of the arguments. The relationships observed were based upon the quantity of arguments generated as it correlated to an individual's attitudinal frame of reference as previously defined.

Our concern now is to discuss what the response patterns of subjects tells us about the rhetorical process of invention. Let us therefore consider how an individual who is extreme, moderate, or neutral in his attitude generates argements.

An individual who takes an extreme attitudinal position toward an issue tends to generate large numbers of arguments. Among the total arguments he generates, he accepts more than he rejects or remains uncommitted to. The issue itself appears to have relative importance to him. And finally, his latitudes of acceptance, rejection, and noncommitment indicate that he is highly involved with the issue. Thus, we might conclude that when an individual's attitudinal frame of reference has the characteristics of extremity of position toward an issue, belief in

the importance of the issue, and an involvement with the issue, that individual is capable of generating large numbers of arguments, the majority of which will be acceptable to him.

What explanation can be offered that might account for this behavior? We should note first that an individual's own stand on an issue is (1) contained within what the individual is willing to accept, reject, and remain uncommitted to, and (2) that an individual's own stand on an issue operates as an anchor for judging other positions. We might argue that a person who takes an extreme stand toward an issue, views the issue as important to himself, and furthermore perceives a high degree of involvement with the issue, therefore, processes and judges information, for the most part, as attitudinally relevant.

When information is perceived as attitudinally relevant, judgment is made regarding the "acceptability" or "unacceptability" of processed information related to the individual's own stand on the issue. With own position as the anchor for judgment, processed information is either assimilated or contrasted to the person's own stand on the issue. Information which is assimilated or contrasted to a person's own stand is then presumably stored as information sets, and can be retrieved with the assistance of a topical system -- as was seemingly done in this study. However, owing to the contrast effect, the person does not differentiate as finely among arguments which are objectionable to him, thereby generating fewer of them than acceptable arguments.

We should bear in mind that the majority of the subjects participating in this experiment were favorably disposed toward the legalization of abortion in the state of Pennsylvania. It is therefore no

surprise that when they were called upon to generate arguments in response to the issue of legalizing abortion, they generated more acceptable arguments than either arguments which they rejected or which they remained uncommitted to. An individual who is predisposed to a particular position on an issue seems to judge information regarding the issue as attitudinally relevant, assimilating or contrasting it to his own position. When the individual retrieves stored information in order to generate arguments he is more likely to discriminate among arguments that have been assimilated and thus generates more acceptable arguments. On the other hand, the individual does not seem to differentiate among information that has been stored and contrasted to his own position and therefore generates fewer objectionable arguments. When an individual perceives information as being attitudinally relevant, he does so possibly because he views the issue as important to himself and he sees his involvement to be relatively great. Consequently, information that is perceived as related to his own position is judged, and because judgments are made about the acceptability or unacceptability of attitudinally relevant information, the information is stored. Therefore an individual with an extreme position on an issue is able to generate large numbers of arguments which are acceptable to his own stand on the issue and lumps objectionable items into a relatively undifferentiated objectionable category.

How does taking a moderate stand on an issue relate to the generation of arguments? An individual with a moderate position toward an issue presumably tends to generate about the same number of arguments as a person with an extreme position and accepts more of the arguments he generates than he rejects. However, a person with a moderate stand

on an issue perceives the issue less important to himself than the person with an extreme position. On the other hand, an individual with a moderate position is as highly involved with the issue as are individuals with extreme positions.

Although an individual has a moderate position toward an issue he does take a position. Whether the position is for or against the issue produces no differences in the number of arguments he generates. Because he takes a position, although moderate, he possesses an anchor for judging related information. Consequently the need arises for him to make decisions regarding the acceptability or unacceptability of related information. Information that is processed is either assimilated or contrasted to his own stand and is stored as information sets. When the information sets are later tapped -- via the generation of arguments with the assistance of a topical system -- the individual generates relatively large numbers of arguments which are acceptable to his own position.

In these considerations we need to keep in mind the homogeneity of the subjects participating in this study. The majority of the subjects had favorable attitudinal positions toward abortion. Thus, when confronted with the task of generating their own arguments regarding the legalization of abortion, these subjects produced mostly favorable arguments, for these were acceptable to their own pro positions. The moderate individual was predisposed toward the issue and it would therefore follow that when the moderates confronted attitudinally relevant information, they processed it in the same fashion as individuals with extreme positions. They assimilated or contrasted related information which was then stored as

information sets. When retrieving the information they tended to retrieve information which had been assimilated, discriminating more discretely among items they accepted, therefore generating more acceptable arguments, and lumping together contrasted information, thus generating fewer objectionable items.

Although the inventive behavior of a person taking a moderate position on the issue of abortion resembles one who takes an extreme position, the moderate sees the issue as less important and yet experiences a relatively high degree of involvement with the issue. Why? The explanation for this behavior which seems the most cogent derives from the fact that the moderate takes a stand on the issue even though he holds his position less intensely and sees the issue as less important than the person with an extreme position. By the mere fact of taking a position, one should tend to view information as attitudinally relevant. Consequently the need would arise to make judgments regarding such information. When these judgments are made the judgments become a part of stored information sets. When we tap these information sets we are able to learn that a person with a moderate view toward an issue has a number of stored sets, and naturally enough, is able to generate relatively large numbers of arguments which tend to be acceptable to his own position. Furthermore, it is not at all unlikely that the data demonstrate moderates as highly involved. There is no reason to believe that because individuals are moderate in their position that they should also be less involved. It is quite conceivable that the moderates view their involvement just as strongly as a person with an extreme position -- which happened to be the case in this study. The difference between the two positions is with respect to the extent to which the extreme and the moderate were willing

to carry their respective positions, and not with the involvement in their respective positions.

Let us now consider the behavior of a person with a neutral position toward the issue of abortion to see how it contrasts with extreme and moderate positions. A person with a neutral position toward an issue should not be interpreted as refraining from taking a stand. A declaration of neutrality is a stand -- it is a no position position. The person is neither for nor against the issue, as so declared. And consistent with that position, he generates fewer arguments than a person who is either extreme or moderate. The person with a neutral stand perceives the issue as having little importance to himself; he does not feel involved with the issue. He has presumably processed little information, finding it attitudinally irrelevant; thus he generates fewer arguments than either the extreme or moderate individual. Nonetheless, like others, he accepts more of his own arguments than he rejects. If the reverse were true, if information was perceived as attitudinally relevant, the individual would generate larger numbers of arguments.

Although a position of neutrality is no position position, there does seem to be reason for believing that an individual maintaining this kind of position does process and judge information which is acceptable and objectionable to him, assimilating and contrasting the information in relation to his own stand. In similar fashion to individuals with extreme and moderate positions, the neutral tends to generate arguments which are supportive of his own position. Therefore, when he generates arguments he too generates more acceptable arguments than arguments which he rejects.

Based on what has been said about neutrals, it appears all the more likely that an individual's perception of the importance of an issue when taken by itself, provides little insight for examining rhetorical invention. What does seem crucial to examining rhetorical invention is the extremity of position maintained by an individual and the degree of involvement with the issue. As noted in the above discussion, generally speaking, the more extreme and involved an individual is in his attitudinal position the more numbers of arguments he generates; the more neutral and less involved an individual, the fewer arguments he generates. In all cases, individuals tend to generate large numbers of arguments which are acceptable to their own position. It should be noted that whether an individual's own position is Pro, Con, or Noncommittal has little visible relation to the numbers of arguments generated.

In view of the previous discussion we can conclude that the rhetorical process of invention is systematically related to attitudinal frame of reference. Data are not available regarding rhetorical invention "in process" and from this data we must build hypotheses that examine and explain the underlying nature of the relationships that have been identified.

By way of quick review, the relationships observed were:

1. THE RELATIVE SIZE OF AN INDIVIDUAL'S LATITUDE OF ACCEPTANCE AND REJECTION AS DETERMINED BY THE SUBJECTS' OWN GENERATION AND SORTING OF ARGUMENTS SYSTEMATICALLY RELATES TO THE TOTAL NUMBER OF ARGUMENTS AN INDIVIDUAL GENERATES IN RESPONSE TO AN ISSUE-CONCEPT. That is to say, the greater the latitude of acceptance the more total arguments generated, and conversely, the greater the latitude of rejection the fewer the total arguments generated.

2. THE EXTREMITY OF A PERSON'S ATTITUDINAL POSITION TOWARD AN ISSUE-CONCEPT SYSTEMATICALLY RELATES TO THE NUMBER OF ARGUMENTS GENERATED. Specifically, individuals with extreme and moderate positions generate large numbers of arguments. Neutrals generate significantly fewer arguments.

3. EXTREMITY OF POSITION AND DEGREE OF INVOLVEMENT SYSTEMATICALLY RELATES TO THE NUMBER OF ARGUMENTS GENERATED. The more extreme an individual's position and the more involved the person is with the issue the more arguments the individual generates. The more neutral a person's position and the less involved the individual is with the issue the fewer number of arguments he generates.